



Service Priorities and Programmes
Electronic Presentations

Convention ID: 478

Submitting author: Mr S F CHU

Post title: Advanced Practice Nurse, PMH, KWC

Does Music Reduce Anxiety and Pain Undergoing Transrectal Ultrasound Guided Biopsy?

Chu SF(1)

(1)Surgery Department, Princess Margarnet Hospital

Keywords:

Prostate cancer

biopsy

music

anxiety

pain

Introduction

Prostate cancer

In Hong Kong, prostate cancer have the 3rd highest incidence rate among male (Hong Kong Cancer Registry, 2015). When patient is suspected to have prostate cancer in view of abnormal digital rectal examination or elevated prostate specific antigen level, patient must undergo transrectal ultrasound guided prostate biopsy to rule out present of malignancy cell. It make this procedure become one of the most common performed urological procedures (Loeb, et al, 2013). It is usually a well tolerated procedure, however, minor complications like pain and bleeding are common (Rosario, et al, 2012). Apart from physical distress, about 20% of patients experienced high level of stress and anxious mood when undergoing prostate biopsy (MaceField, et al., 2010).

Pain control for transrectal ultrasound guided prostate biopsy

According to the literature review performed by Lee and Woo (2014), approaches that commonly use to minimize pain and discomfort includes intravenous sedoanalgesia, inhalational agents and peri-prostatic infiltration of local anaesthetic. All of them are pharmaceutical or invasive, that is why something that is easy, convenience, non-invasive and effective is desirable for improve patient's experience during prostate biopsy taking.

Music intervention

Music therapy is a non-invasive, safe and inexpensive intervention which have been applied to medical care for a long time. It is believed to have positive effects on patient pain, anxiety and stress (Nilsson, 2008). Chlan (2009) suggested that music improve anxiety by occupying attention channels in brain with auditory stimuli and minimized other sensation. Besides, Watkins (1997) suggested music help relaxation by changes in plasma stress hormone levels.

Objectives

1. Evaluated the effectiveness of music interventions on reducing anxiety and pain of patient undergoing TRUS biopsy

2. Identify the methods of delivery music intervention for patient undergoing TRUS biopsy

Methodology

Literature review on the application of music intervention on TRUS biopsy were performed. Keywords used for literature searches includes Prostate, music, music therapy. Databases searched includes Medline, CINAHL, EMBASE, PubMed, Cochrane database, Joanna Briggs Institute EBP database. Quality assessment were performed with Effective Public Health Practice Project (EPHPP)

Result

5 articles in total are identified after literature searches. Out of the 5 identified articles, there are 4 included anxiety as their primary outcome and 3 of them showed music therapy can statistically significance reduce patients anxiety. For pain, out of the 5 identified articles, there are 2 study able to demonstrate effective pain control over usual method.

Conclusion:

1. Effect of music intervention on reducing pain for patient undergoing TRUS biopsy was controversial
2. Effect of music intervention on reducing anxiety for patient undergoing TRUS biopsy was effective
3. Method of effective delivery of music intervention was controversial and further study should be performed
4. Music intervention should be implemented in TRUS-Biopsy